

AMENDED IN ASSEMBLY APRIL 16, 2007

AMENDED IN ASSEMBLY APRIL 9, 2007

CALIFORNIA LEGISLATURE—2007–08 REGULAR SESSION

## ASSEMBLY BILL

**No. 785**

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**Introduced by Assembly Member Hancock**

February 22, 2007

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An act to add Section 7124.7 to the Business and Professions Code, to amend Section 43812 of, and to add Sections 39619.7 and 39619.8 to, the Health and Safety Code, ~~and to add Section 155.9 to the Streets and Highways Code, relating to energy~~ *relating to energy efficiency*.

### LEGISLATIVE COUNSEL'S DIGEST

AB 785, as amended, Hancock. Energy efficiency measures.

(1) Existing law, the Contractors' State License Law, provides for the licensure and regulation of contractors by the ~~Contractor's~~ *Contractors'* State License Board. Under existing law, the board may take disciplinary action against a contractor for committing specified acts. Existing law makes state or local agencies responsible for the enforcement of building standards.

This bill would require the board, *in order to mitigate the urban heat island effect, to take* ~~disciplinary action~~ *proactive enforcement action* against a contractor for failure to *properly obtain building permits and for failure to* comply with specified ~~Building Energy Efficiency Standards~~ *building efficiency standards*. The bill would also require the board, on or ~~after~~ *before* January 1, 2009, *and annually thereafter*, to report to the Legislature on the status of both the compliance and noncompliance of contractors with the ~~Building Energy Efficiency Standards~~ *building efficiency standards*.

(2) Existing law provides that the Department of Transportation shall have full possession and control of all state highways and associated property. Existing law authorizes the department to make regulations or require conditions so that the cutting of pavement on freeways and a consequential impairment of their use be avoided to the extent possible. Under existing law, the State Air Resources Board is responsible for control of air pollution from vehicular sources. Under existing federal law, the Lawrence Berkeley National Laboratory, which is responsible for science and engineering research, is owned by the United States Department of Energy. The State Energy Resources Conservation and Development Commission has responsibilities with respect to the control of emissions of greenhouse gases.

This bill would also require the State Air Resources Board, the State Energy Resources Conservation and Development Commission, the Lawrence Berkeley National Laboratory, and any other state and local agencies that desire to participate to form a joint task force to develop a coordinated plan for how to include urban heat island mitigation measures in air quality compliance standards. The bill would require the joint task force to report to the Legislature on or before January 1, 2009, and annually thereafter, on the status of the coordinated plan.

The bill would also require the State Air Resources Board and the State Energy Resources Conservation and Development Commission to prepare a report on cool car coating technologies, as specified, to be submitted to the Legislature on or before January 1, 2009, and annually thereafter.

~~The bill would require the Department of Transportation, the Lawrence Berkeley National Laboratory, and the State Air Resources Board to collaborate and prepare a report on cool pavements, as specified, to be submitted to the Legislature by January 1, 2009, and annually thereafter.~~

(3) Under existing law, the California Energy-Efficient Vehicle Group Purchase Program, the state encourages the purchase of energy-efficient vehicles, as defined, by local and state agencies through a group-purchasing program that uses the purchasing leverage of these agencies to lower the purchase price of those vehicles.

This bill would ~~expand~~ *revise* the definition of “energy-efficient vehicles” to include ~~white vehicles~~ *cool-colored vehicles, cool-colored hybrid vehicles, or a cool-colored alternative fuel vehicle, as specified.* The bill would also define “cool-colored vehicle” in this context.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

1     *SECTION 1. It is the intent of the Legislature to enact*  
2     *legislation that mitigates the urban heat island effect by reducing*  
3     *summertime urban air temperatures. Reducing the effect of urban*  
4     *heat islands will help address the impact of rising temperatures*  
5     *associated with global warming, and therefore improve air quality,*  
6     *reduce energy use, and improve overall thermal comfort.*

7     ~~SECTION 1. The Legislature finds and declares all of the~~  
8     ~~following:~~

9     ~~(a) Global warming poses a serious threat to the economic~~  
10    ~~well-being, public health, natural resources, and the environment~~  
11    ~~of California.~~

12    ~~(b) The level of energy efficiency of California's buildings is~~  
13    ~~a direct contributor to both the potential to reduce the impacts of~~  
14    ~~global warming and California's ability to cope with climate~~  
15    ~~changes that are unavoidable.~~

16    ~~(c) Global warming will increase the strain on electricity~~  
17    ~~supplies necessary to meet the demand for summer air-conditioning~~  
18    ~~in the hottest part of the state, further emphasizing the importance~~  
19    ~~of increasing energy efficiency in buildings that directly impacts~~  
20    ~~air-conditioning.~~

21     *SEC. 2. The Legislature finds and declares all of the following:*

22     *(a) The term "heat island" refers to urban air and surface*  
23     *temperatures that are sometimes nearly 10 degrees Fahrenheit*  
24     *higher than nearby rural areas. Pavement, buildings, low reflective*  
25     *building roofs, and other infrastructure, that absorb the sun's*  
26     *radiation and trap heat, result in increased temperature in urban*  
27     *areas.*

28     *(b) Average temperatures throughout California rose nearly*  
29     *two degrees Fahrenheit between 1950 and 2000, with urban areas*  
30     *leading the trend to warmer conditions, according to a study by*  
31     *scientists at NASA and California State University, Los Angeles.*  
32     *The combined effect of the urban heat island phenomena and rising*  
33     *temperatures resulting from global warming affects the health of*  
34     *Californians since higher temperatures and high heat days increase*

1 smog, contribute to heat related fatalities, and overburden our  
2 electricity systems.

3 (c) Higher temperatures from the urban heat island effect are  
4 responsible for 5 to 10 percent of urban peak electric demand from  
5 air-conditioners, and as much as 20 percent of population-weighted  
6 smog concentrations in urban areas.

7 (d) The urban heat island effect poses a serious threat to the  
8 economic well-being, public health, natural resources, and the  
9 environment of California.

10 (e) A distinction between urban heat islands and global warming  
11 exists. Heat islands describe local-scale temperature differences,  
12 generally between urban and rural areas. In contrast, global  
13 warming refers to a gradual rise of the earth's surface temperature.  
14 While they are distinct phenomena, summertime heat islands both  
15 intensify the effect of rising temperatures due to global warming  
16 and may contribute to global warming by increasing demand for  
17 air-conditioning, which results in additional power plant emissions  
18 of heat-trapping greenhouse gases. Strategies to reduce heat  
19 islands, therefore, can mitigate the impacts of rising temperatures  
20 and also reduce the emissions that contribute to global warming.

21 (f) California's building energy efficiency standards specified  
22 in Part 6 of Title 24 of the California Code of Regulations, include  
23 specifications for cool roofing materials and other measures to  
24 newly constructed buildings and alterations or additions to existing  
25 buildings. Effective application of these standards will increase  
26 the level of energy efficiency of California's buildings and reduce  
27 the impacts of both urban heat islands and global warming and  
28 thus California's ability to cope with warming from climate  
29 changes that may be unavoidable.

30 (g) Simple changes that increase the reflectivity and thermal  
31 emittance of roofs on our buildings, as well as measures that  
32 increase the reflectivity of paved surfaces, can significantly reduce  
33 temperatures, cooling our cities and help protect the public health  
34 of all Californians. In addition, proper planting of trees, shrubs,  
35 and other plants to shade buildings and intercept solar radiation  
36 will greatly benefit the urban areas.

37 (h) Cool-colored cars save energy by reducing the "soak" air  
38 temperature inside the cabin of a vehicle parked in direct sunlight.  
39 This permits the installation of a smaller, lighter-weight, and more  
40 fuel efficient air-conditioner.

1     ~~(d)~~

2     (i) California's building energy efficiency standards, specified  
3 in Part 6 of Title 24 of the California Code of Regulations,  
4 represents a state resource for accomplishing increased building  
5 energy efficiency, not only in newly constructed buildings but also  
6 in additions and alterations to existing buildings. These standards  
7 are recognized as leading the nation in energy savings and serving  
8 as one of the primary energy policy tools that has resulted in  
9 California's per capita energy use staying essentially constant over  
10 the past 30 years while that of the rest of the United States  
11 increased steadily.

12     ~~(e)~~

13     (j) The effectiveness of the building energy efficiency standards  
14 is dependent on the conscientious efforts of licensed contractors  
15 in California to build buildings and install equipment in compliance  
16 with the standards.

17     ~~(f)~~

18     (k) The Governor and the Legislature recognize that—~~an~~  
19 ~~underground economy plagues California~~ *many buildings are being*  
20 *reroofed without a permit*. Contractors operating in the  
21 underground economy are in flagrant violation of California  
22 contracting law. In particular, contractors operating without a  
23 license, and whether licensed or not, willfully and deliberately fail  
24 to obtain a building permit and willfully and deliberately failing  
25 to comply with the building laws of the state. Unlicensed and  
26 licensed contractors who market their services with these  
27 underground practices represent unfair competition, undercutting  
28 legitimate contractors who endeavor to conscientiously comply  
29 with contracting and building laws. This underground activity  
30 denies state and local governments of license and building permit  
31 revenue, diminishing the ability of state and local agencies to  
32 provide enforcement services intended to ensure compliance with  
33 these laws. These practices particularly damage and diminish the  
34 potential for conscientious compliance with the building energy  
35 efficiency standards.

36     ~~(g)~~

37     (l) The mission of the ~~Contractors~~ *Contractors'* State License  
38 Board is to protect consumers by regulating contractors to promote  
39 the health, safety, and general welfare of the public in matters  
40 related to construction. The ~~Contractors~~ *Contractors'* State License

1 Board has recently gained national recognition for its proactive  
2 enforcement efforts in cooperation with the Governor's Economic  
3 and Employment Enforcement Coalition to uncover and eradicate  
4 illegal activity.

5 ~~(h)~~

6 (m) It has become critically important to achieve the energy  
7 efficiency and global climate change benefits that result from  
8 conscientious contractor performance in the quality construction  
9 of California buildings and the installation of energy-related  
10 equipment. It is also important for the ~~Contractors~~ Contractors'  
11 State License Board to extend their successful proactive  
12 enforcement efforts by placing priority on eradicating underground  
13 practices related to properly obtaining building permits and  
14 complying with the Building Energy Efficiency Standards *in order*  
15 *to mitigate the urban heat island effect*.

16 ~~SEC. 2.~~

17 SEC. 3. Section 7124.7 is added to the Business and Professions  
18 Code, to read:

19 7124.7. (a) ~~The board shall take disciplinary action against a~~  
20 ~~contractor~~ *In order to mitigate the urban heat island effect, the*  
21 *board shall take proactive enforcement action against a contractor*  
22 *for failure to properly obtain building permits and for failure to*  
23 *comply with the building energy efficiency standards specified in*  
24 *Part 6 of Title 24 of the California Code of Regulations.*

25 (b) On or before January 1, 2009, and annually thereafter, the  
26 board shall report to the Legislature on the status of both the  
27 compliance and noncompliance of contractors with the building  
28 energy efficiency standards.

29 ~~SEC. 3.~~

30 SEC. 4. Section 39619.7 is added to the Health and Safety  
31 Code, to read:

32 39619.7. (a) The State Air Resources Board, the State Energy  
33 Resources Conservation and Development Commission, the  
34 Lawrence Berkeley National Laboratory, and any other state and  
35 local agencies that desire to participate shall form a joint task force  
36 to assist in developing a coordinated plan for how to include urban  
37 heat island mitigation measures in air quality compliance standards  
38 and ~~now how~~ to develop quantification methods to offer air quality  
39 credits for ~~such~~ those measures.

(b) On or before January 1, 2009, and annually thereafter, the joint task force shall report to the Legislature on the status of the coordinated plan.

~~SEC. 4.~~

SEC. 5. Section 39619.8 is added to the Health and Safety Code, to read:

39619.8. On or before January 1, 2009, and annually thereafter, the State Air Resources Board and the State Energy Resources Conservation and Development Commission shall prepare a report to include the following to be submitted to the Legislature:

(a) The development of cool car coating technologies, which shall include research, practice, and costs.

(b) An analysis of the statewide energy and air quality benefits of ~~white vehicles~~ *cool-colored vehicles as specified in subdivision (f) of Section 43812.*

~~SEC. 5.~~

SEC. 6. Section 43812 of the Health and Safety Code is amended to read:

43812. For the purposes of this article, the following definitions apply:

(a) "Department" means the Department of General Services.

(b) "Director" means the Director of General Services.

(c) "Energy-efficient vehicle" means either of the following:

(1) A *cool-colored* vehicle that meets California's super ultra-low emission vehicle (SULEV) standard for exhaust emissions and the federal inherently low-emission vehicle (ILEV) evaporative emission standard, as defined in Part 88 (commencing with Section 88.101-94) of Title 40 of the Code of Federal Regulations.

(2) A *cool-colored* hybrid vehicle or ~~an~~ *a cool-colored* alternative fuel vehicle that meets California's advanced technology partial zero-emission vehicle (AT PZEV) standard for criteria pollutant emissions.

~~(3) A white vehicle.~~

(d) "Local agency" means any governmental subdivision, district, public and quasi-public corporation, joint powers agency, public agency or public service corporation, authority, agency, board, commission, town, city, county, city and county, fire district, special district, school district, public utility, community college,

1 or municipal corporation, whether incorporated or not or whether  
2 chartered or not, or any other public entity.

3 (e) “State agency” means any department, division, board,  
4 bureau, commission, or other authority of the State of California,  
5 the University of California, or the California State University.

6 (f) “Cool-colored vehicle” means a vehicle whose opaque  
7 interior and shell surfaces are designed to stay cool in the sun.  
8 These surfaces are colored with special pigments that maximize  
9 reflectance of the invisible, near infrared component of sunlight.

10 SEC. 6. ~~Section 155.9 is added to the Streets and Highways~~  
11 ~~Code, to read:~~

12 ~~155.9. The Department of Transportation, the Lawrence~~  
13 ~~Berkeley National Laboratory, and the State Air Resources Board~~  
14 ~~shall collaborate and prepare a report to be submitted to the~~  
15 ~~Legislature on or before January 1, 2009, and annually thereafter,~~  
16 ~~to include the following:~~

17 ~~(1) Cost-benefit analysis of cool pavements.~~

18 ~~(2) Guidelines and technical implementation plans for mandatory~~  
19 ~~installation of cool pavements on public and private land.~~

20 ~~(3) A coordinated plan for implementation of the guidelines in~~  
21 ~~subdivision (b) by state agencies, cities, counties, and cities and~~  
22 ~~counties to ensure the installation of cool pavements on all~~  
23 ~~applicable paved surfaces in this state.~~

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25  
26 CORRECTIONS:

27 Text—Pages 4 and 5.  
28